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Policy Ltr 7-99
24 Jun 99

From: Commander, Seventh Coast Guard District
To: Distribution

Ref: (a) CGD SEVEN Marine Safety Program Measurement Plan dated 8 Jun 99

Subj: MARINE ENVIRONMENTAL RESPONSE – KEY BUSINESS DRIVER SURVEY

1. This policy letter sets forth the procedures to measure our effectiveness in the aftermath of a response to an actual or simulated pollution incident occurring within the Seventh Coast Guard District area of responsibility. In support of the Coast Guard's "Best Response" philosophy and to provide us an indicator of effectiveness and success of the Unified Command, the enclosed survey was developed. This measurement tool is considered a lagging indicator that will provide us stakeholder data and lessons learned concerning the response actions taken specific to a pollution incident or simulated exercise. Measures gleaned from the completion of the Marine Environmental Response – Key Business Driver Survey supports and compliments measurement requirements found within Goal #1 of reference (a). Goal #1 - "Reduce the Consequence of Pollution Incidents" aligns with the "Best Response" goal of "Minimize the Consequences of Pollution Incidents."

2. The survey is essentially a self-assessment effort. To enhance our data collection and ability to frequently review our progress towards a "Best Response," Seventh District Marine Safety Offices shall use the enclosed survey as part of their evaluation process during the aftermath of any oil spill response, exercise, or training event where the complexity of the scenario drives the formal formation a Unified Command staff either in its entirety or as a partial mobilization. Unified Command staff personnel selected to complete the survey and the number of individual surveys completed per incident is at the discretion of the On Scene Coordinator (OSC). The survey is separated into six sections that correspond to a specific pollution response Key Business Driver. Each section is a individual page of the survey that can be removed, filled out, and handed in separately. This allows the applicable survey sections to be addressed by the appropriate personnel specific to their functions and knowledge of the pollution event or exercise. Once the surveys are completed, they should be forwarded to the CGD SEVEN (mr) staff. The data from the survey will be compiled and used in accordance with reference (a). Again it is important to note that the information gleaned from this effort is not meant as an evaluation on individual action or decision making but is focused towards process improvement and enhancing our pursuit of the "Best Response" philosophy. The enclosed survey development summary will enhance implementation.

WILLIAM H. FELS
By direction

Encl: (1) Seventh Coast Guard District Marine Environmental Response – Key Business Driver Survey dated 09 Jun 99
(2) Marine Environmental Response – Key Business Driver Survey Development Summary

Dist: All CGD SEVEN MSOs

Marine Environmental Response – Key Business Driver Survey

Revision: 09 Jun 99

Purpose of Survey: The purpose of this survey is to find out what you and other members of the response community think about the effectiveness and success of a pollution response or exercise. Your honest answers will give us a clearer picture of where our response efforts are succeeding and where we still face improvement challenges. The information you provide will help improve pollution response goals, policy, training, and ultimately the effectiveness of the response itself.

Privacy Act Statement

A. **Authority:** 5 USC 301; 14 USC 632; Executive Order 9397
B. **Purpose:** The information requested in this survey will be used in research designed to improve the training, assignment, and development of Coast Guard personnel. The information will not be used to evaluate you as an individual, your supervisor, or your organization. The information will not be entered into your personnel file.
C. **Effect On Individuals Not Providing Information:** Participation is voluntary. Providing the information requested will make the survey results more meaningful.

Marking Instructions

- Use a No. 2 pencil only
- Do not use ink, ballpoint, or felt tip pens.
- Make solid marks that fill the response completely.
- Erase cleanly any marks you wish to change.
- Make no stray marks on this form.

O **Correct Mark**

Introduction

The survey is divided in six sections that correspond to a specific pollution response Key Business Driver. Each section is a separate page of the survey that can be removed, filled out, and handed in separately. Fill out the sections that apply to your knowledge of the pollution event or exercise. Although the survey is designed to obtain your opinion, your direct knowledge, or observation of the circumstances, the events described in the questions are critical to information accuracy.

Marine Environmental Response – Key Business Driver Survey

Part 1 - Demographics

Instructions: This first section asks some questions about you and your level of involvement in pollution response. The purpose of the demographics is so that we can group responses and draw general conclusions based on your experience, roles, and responsibilities in the pollution response or exercise.

1. How long have you been directly involved in pollution response?

   - O No previous involvement
   - O Less than 6 months
   - O 6 months – 3 years
   - O 3 – 6 years
   - O 6 – 10 years
   - O 10 or more years

2. What is your association with pollution response?

   - O Coast Guard or EPA
   - O Citizens Group
   - O Trustee
   - O Media Representative
   - O Environmental Group
   - O General Public
   - O Insurance Company Rep
   - O Federal, State, or Local Political Rep
   - O Federal, State or Local Government Response Organization
   - O Scientific Advisor: Specify Type: _____
   - O Potential Responsible Party
   - O Industry Representative
   - O Oil Spill Removal Organization (OSRO)
   - O Economic/Business Interest (Fishing, Port Authority, etc.)
   - O Other _____ (fill in)

3. If applicable, indicate the functional area within the Incident Organization that you performed the majority of your tasks during the response/exercise?

Command or Command Staff

- O Incident/Unified Command
- O Safety
- O Liaison
- O Information
- O Legal

Planning

- O Situation Unit
- O Resources Unit
- O Documentation Unit
- O Demobilization Unit
- O Technical Specialist

Finance

- O Time Unit
- O Compensation/ Claims Unit
- O Cost Unit
- O Procurement Unit

Operations

- O Staging Areas
- O Air Operations
- O Recovery and Protection
- O Source Control Operations
- O Wildlife Recovery/Rehabilitation
- O Advanced Technology Operations
- O SAR/EMS
- O Not Specified Above

Logistics

- O Communications Unit
- O Medical Unit
- O Food Unit
- O Supply Unit
- O Facilities Unit
- O Vessel Support Unit

If you don't have direct knowledge of the events or circumstances described, please leave the section blank.

Incident Organization

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neutral	5 Somewhat Agree	6 Agree	7 Strongly Agree
1. A standard, well known and understood response management system was used to respond and manage the incident.	O	O	O	O	O	O	O
2. All responders were familiar with the response management system and knew their role within the system.	O	O	O	O	O	O	O
3. Response objectives were established early and were flexible, measurable, and attainable.	O	O	O	O	O	O	O
4. Response objectives were updated as necessary to reflect changes or the progression of incident operations.	O	O	O	O	O	O	O
5. Response objectives were effectively communicated throughout the organization during the entire incident response.	O	O	O	O	O	O	O
6. The amount of equipment and personnel resources used in the response was appropriate to achieve incident objectives and was reasonable and necessary.	O	O	O	O	O	O	O
7. Excess resources were quickly demobilized throughout the response.	O	O	O	O	O	O	O
8. "Who's responsible for what" (jurisdiction and responsibility) was established early and accepted by all response entities.	O	O	O	O	O	O	O
9. No duplication of effort/task performance occurred during the response.	O	O	O	O	O	O	O
10. The external support provided to the Incident Organization was timely, consistent, and met or exceeded requirements.	O	O	O	O	O	O	O

If you don't have direct knowledge of the events or circumstances described, please leave the section blank.

Part 2 – Survey Section 2

Natural Environment

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neutral	5 Somewhat Agree	6 Agree	7 Strongly Agree
1. Source control efforts were activated quickly and effectively.	O	O	O	O	O	O	O
2. Containment and recovery operations were implemented quickly and effectively.	O	O	O	O	O	O	O
3. Environmentally sensitive areas were identified and prioritized for the spill conditions, and this information was quickly passed to responders in the field.	O	O	O	O	O	O	O
4. Adequate protection and recovery resources were mobilized to effectively protect environmentally sensitive areas.	O	O	O	O	O	O	O
5. Protection strategies were implemented quickly and monitored to make sure that they were effective as conditions changed.	O	O	O	O	O	O	O
6. Decisions on use of non-mechanical response options (dispersants, in-situ burning, neutralizations, etc.) were made quickly and based on a good understanding of the issues.	O	O	O	O	O	O	O
7. There was good coordination among the natural resource agencies in determining priorities for response and cleanup methods. Natural resource trade-offs were openly discussed and evaluated, and consensus reached on the final decision.	O	O	O	O	O	O	O
8. The most effective shoreline cleanup methods were implemented in a manner which minimized impacts and increased recovery rates.	O	O	O	O	O	O	O
9. There were no serious environmental impacts that could have been avoided through better organization or performance of the response team.	O	O	O	O	O	O	O
10. There was good communication with the public on what the real environmental problems were and how these problems were being mitigated.	O	O	O	O	O	O	O

If you don't have direct knowledge of the events or circumstances described, please leave the section blank.

Part 2 – Survey Section 3

Economic Impact

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neutral	5 Somewhat Agree	6 Agree	7 Strongly Agree
1. Overall response efforts minimized property damage and impacts to the local/regional economy (e.g., commercial and sport fisheries, tourism, maritime commerce, loss of income, etc.).	O	O	O	O	O	O	O
2. Economic impact discussed in concert with environmental considerations when prioritizing protection strategies.	O	O	O	O	O	O	O
3. Adequate protection and recovery resources were mobilized to effectively reduce or minimize property damage and economic impact.	O	O	O	O	O	O	O
4. There was good communication with the stakeholders and the public on what the potential economic impacts were and how these impacts were being mitigated.	O	O	O	O	O	O	O
5. Decision to close economically critical areas (waterways, fisheries, beaches, etc.) were made in an appropriate manner with due consideration of potential impact to the local or regional economy.	O	O	O	O	O	O	O
6. Decisions to resume normal operations or activities (open waterways, fisheries, beaches, etc.) were made in an appropriate manner with due consideration of potential impact to the local or regional economy.	O	O	O	O	O	O	O

If you don't have direct knowledge of the events or circumstances described, please leave the section blank.

Part 2 – Survey Section 4

Public Communication

	1 Strongly Disagree	2 Disagree	3 Somewhat Disagree	4 Neutral	5 Somewhat Agree	6 Agree	7 Strongly Agree
Joint Information Center and Organization							
1. The right people were on scene to staff the Joint Information Center.	O	O	O	O	O	O	O
2. Accurate, timely response information was easily accessible to Joint Information Center personnel.	O	O	O	O	O	O	O
3. The Unified Command's approval of Joint Information Center products was efficient and timely.	O	O	O	O	O	O	O
4. The correct equipment was available to get the job done.	O	O	O	O	O	O	O
5. Joint Information Center products were proactively released to the public and the media to meet their needs and deadlines.	O	O	O	O	O	O	O
Media Representative Perspective							
1. Information the public needed quickly to make adjustments to their plans and/or make damage claims was available.	O	O	O	O	O	O	O
2. The response organization was compassionate and honest in dealing with the public regarding the incident.	O	O	O	O	O	O	O
3. The response organization demonstrated the expertise and professionalism to handle the incident.	O	O	O	O	O	O	O
4. A spirit of cooperation was evident in the attitude of the response personnel.	O	O	O	O	O	O	O
5. Every reasonable effort was made to minimize the impact of the spill to public health, the natural environment, and economy.	O	O	O	O	O	O	O

If you don't have direct knowledge of the events or circumstances described, please leave the section blank.

Part 2 – Survey Section 5

	1	2	3	4	5	6	7
	Strongly Disagree						
	Disagree						
	Somewhat Disagree						
	Neutral						
	Somewhat Agree						
	Agree						
	Strongly Agree						

Stakeholders

Stakeholder Support

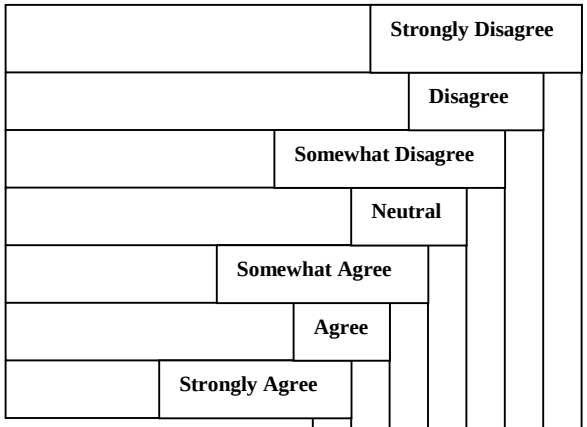
1. The response organization moved quickly and decisively to deal with the Incident and minimize its impact on my business, organization, or personal property.	O	O	O	O	O	O	O
2. Timely, accurate information from the response organization helped me minimize the impact to my business, organization, personal property, and daily routine.	O	O	O	O	O	O	O
3. The response organization was proactive in providing information about opportunities for employment and/or new businesses related to the incident.	O	O	O	O	O	O	O

Stakeholder Meetings

1. I was contacted in a timely manner, given consistent and understandable information, and received the help I needed.	O	O	O	O	O	O	O
2. The response people I dealt with were very courteous and kind. My concerns were heard, valued, and taken into consideration for response activities.	O	O	O	O	O	O	O
3. Response personnel were open and honest. When they did not have the answer, they said so and offered to get back to me or suggested an alternative information source.	O	O	O	O	O	O	O
4. The dedication and commitment of the response personnel have earned my trust. I believe they did the best job possible.	O	O	O	O	O	O	O

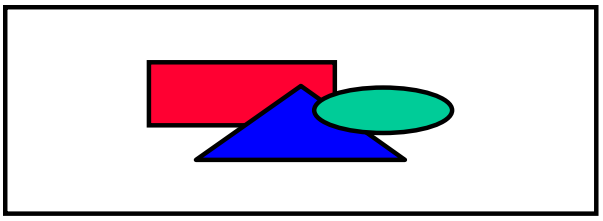
If you don't have direct knowledge of the events or circumstances described, please leave the section blank.

Part 2 – Survey Section 6



Human Health and Safety

	1	2	3	4	5	6	7
Public Health and Safety							
1. The health and safety program staff actively and quickly identified the spill hazards to the public.	O	O	O	O	O	O	O
2. The safety staff effectively categorized and prioritized the hazards to the public.	O	O	O	O	O	O	O
3. The safety staff effectively used the hierarchy of controls (engineering, administrative, personnel protection) given the time constraints of the spill, and implemented adequate controls to protect the public.	O	O	O	O	O	O	O
4. The safety program effectively communicated health and safety issues to the public, including daily hazard announcements, potential exposures, and proper self protection measures.	O	O	O	O	O	O	O
Worker Health and Safety							
1. The safety program actively and quickly identified the spill hazards to spill response workers.	O	O	O	O	O	O	O
2. The safety program staff quickly categorized and prioritized the hazards of the spill and advised workers in the field of the results.	O	O	O	O	O	O	O
3. The safety staff effectively used the hierarchy of controls (engineering, administrative, personnel protection) given the time constraints of the spill, and implemented adequate controls to protect the workers.	O	O	O	O	O	O	O
4. The safety staff effectively communicated health and safety issues including full daily briefings on hazards, potential exposures, and proper controls, to all levels and workers in the incident organization.	O	O	O	O	O	O	O



Marine Environmental Response – Key Business Driver Survey

Development Summary

Purpose. This document provides the background, methodology, and a general summary concerning the development of the marine safety program's Marine Environmental Response – Key Business Driver Survey. This information will assist you in understanding the principles and thought that resulted in the creation of the survey and its contents. These details should assist you in using the survey to your best advantage.

"Best Response" Measurement and Alignment. In support of the Coast Guard's "Best Response" philosophy and to provide us an indicator of effectiveness and success of the Unified Command, the Marine Environmental Response – Key Business Driver Survey was developed. This measurement tool is considered a lagging indicator that will provide us stakeholder data and lessons learned concerning the response actions taken specific to a pollution incident or simulated exercises. Measures gleaned from the completion of the Marine Environmental Response – Key Business Driver Survey supports and compliments measurement requirements found within the Seventh Coast Guard District Marine Safety Program Measurement Plan Goal #1. Goal #1 - "Reduce the Consequence of Pollution Incidents" aligns with the "Best Response" goal of "Minimize the Consequences of Pollution Incidents."

External Response Forces. We have identified four external forces at work that appear to have the greatest significance to and impact on our ability to respond to a pollution incident. These following four issues, which are realities of our system, are especially relevant to the National Response System (NRS):

- interest;
- prevention;
- efficiency; and
- increasing risk.

As we consider these four issues and weigh their potential impact in the area of preparedness and response, to ensure that the region is prepared for and able to carry out an effective response, we draw a couple of conclusions and characterize them as challenges.

- Despite the forces challenging our ability to prepare, we need to establish a steady state, effective, and efficient commitment to preparedness. We need some measure of stability in this highly complex and interdependent system. We

need to have an effective and efficient focus on doing the right things, the right way with appropriate concern for all issues.

- Almost as a subset to the need to strengthen commitment to preparedness, is the need to reconsider how we currently value preparedness. We have always supported the philosophy to plan, train and exercise the way you would respond and respond the way you plan, train and exercise. As we measure, it is better to validate our response intentions and know our shortcoming and strengths so we may improve and enhance our processes.

Internal Issues and Principle Stakeholders/Components. By understanding the external issues we can best address and focus upon our internal issues. As we look at our response actions and align them with "Best Response" concepts, we need to concentrate on the overall goal of the NRS and that is to "Minimize the Consequences of Pollution Incidents." Our response system foundation is a partnership of three components:

- companies (those responsible for building, handling, and hauling oil and hazmat);
- contractors (those that we rely on to carry out response and clean-up); and
- the variety of government agencies.

These are the three principle stakeholders chartered to get the business of the response accomplished. The objective of these stakeholders and the "Best Response" principles is the protection of our national interests. Aligning with our program goal, their priority would be the minimization of consequences to our national interests, which are identified as:

- people;
- property;
- the environment; and
- the economy.

These stakeholder components of the response work together, in this partnership, to deliver a "Best Response" to reduce the consequences of a pollution event.

Response Partnerships. Over the years, our system of response has evolved to create a *de facto* partnership between the companies, the contractors, and the government. These three entities carry out the work of the NRS within the region. It is our conviction that the delivery of "Best Response" depends on the best efforts of each of these entities and the components of the NRS each acting responsibly, effectively, and cooperatively in their unique and independent roles. These partners have to mount an effective response to a complex pollution emergency, which becomes a multi-functional event, with a wide variety of things happening simultaneously. Each

independent event, on its own, is a complex multi agency function, that in and of itself will present significant challenges. It is incumbent on the response leadership to see to it that all functions can go forward aggressively, effectively, and simultaneously. Best Response to a significant pollution emergency is akin to standing up, overnight, a multi-million dollar corporation with three partners (Unified Command) that don't want to be in the business.

Survey Methodology. The Marine Environmental Response – Key Business Driver Survey was developed to measure our pursuit of our stated goal and ultimately "Best Response" principles. The following is an explanation of the methodology used to build the survey in support of our measurement plan. We sought to:

- identify the goal which is stated above;

- identify the Key Business Drivers (KBD). For us a KBD is something that must be done well if we are to accomplish our goal. In our model, with one exception, the KBD's for pollution response are based on outcomes that we feel must be delivered in order to conclude that a response has gone well;

- identify the Critical Success Factors (CSF) for each KBD. A CSF is, to a KBD, what a KBD is to a Goal. Each CSF is something that must go well or be done right in order for the KBD to be carried out; and

- develop measures for each of the Critical Success Factors.

Measurement Model. In the measurement arena, there are two general categories of "measurements"; leading indicators and lagging Indicators. Both are valuable to the manager in evaluating progress. The literature suggests, that, whenever possible, your measurement plan should include both. Apart from prevention, our only leading indicator for suggesting capability to "minimize consequences" is in the measuring of preparedness. In this regard, we are concentrating on two measurement efforts.

- we have developed a Response Readiness Index (RRI) or Preparedness Rating (P-Rating), which is included in our District Marine Safety Program Measurement Plan, that will correlate to a level of our apparent readiness to respond to a pollution event and minimize the consequences; and

- we routinely evaluate exercises as an indicator of preparedness.

These two measurement/feedback venues will be our leading indicators. The lagging indicator, then, is to measure the actual outcomes that the goal is based on. That means measuring the consequences of the pollution incident and judging how effective we were at minimizing those consequences. Our primary emphasis at this point in developing a measurement plan is on the lagging indicator or the actual measure of what a response accomplishes relative to minimizing consequences.

Key Business Drivers. We have identified six Key Business Drivers as critical to goal accomplishment. From the pure measurement perspective, five of the six meet the

"outcome" test in that they deal directly with the categories of consequences of the event that we are endeavoring to minimize. The sixth, "Organization" is more of an activity or process that is essential to getting the desired outcomes. It figures so prominently in accomplishment of success, however, that we determined to keep it as a KBD. The following is a closer look at each of the KBDs:

- Human Health & Safety. Critical Success Factors (CSFs) are that there are no injuries, illnesses, and deaths related to the spill or to responders;

- Natural Environment. CSFs are the source of the discharge is minimized, spill is effectively contained/controlled, sensitive areas are protected, and resource damage is minimized;

- Economy. CSFs are Source of the discharge is minimized, spill is effectively contained/controlled, sensitive areas are protected, and resource damage is minimized. The inclusion of "Economy" as a KBD was a late addition after considerable discussion. It is noteworthy that the CSFs for the "Environment," with some modification, may work equally well for "Economy;"

- Public Communication. CSFs are accurate and timely information, positive media coverage of the response, and positive public perception. It is important that the public and media perceive the response as successful. This focuses on the public confidence issue. This KBD is focused on the idea that we will be the first and best source of information in a crisis. There is certainly an expectation that, when we are responding as expected and required, an adequately informed public will more often than not, feel that the system is responding correctly and public confidence will be maintained;

- Stakeholder Support. CSFs are to minimize the impact to stakeholders, stakeholders are well informed, positive meetings with stakeholders, and prompt handling of damage claims. Stakeholder satisfaction is important in that stakeholders perceive the response as successful. Stakeholders are generally divided into four separate groups that have to be directly addressed by the response manager. The separate groups are environmental, economic, political, and assisting/cooperating agencies; and

- Response Organization. CSFs are that objectives were established and communicated, clarity in leadership and responsibility at all levels, and sufficient and efficient resources. The Response management organization effectively & efficiently responds to the incident. Of the KBD's identified, this is the one that does not speak directly to outcomes. However, because it is such a huge factor and so critical to delivering Best Response and achieving the desired outcomes, we have kept it as a KBD. In the best of all possible worlds, the ongoing implementation and adoption of ICS has the potential to some day eliminate the need to identify this as a KBD.

Measuring Critical Success Factors. Having identified the Key Business Drivers and the supporting or enabling Critical Success Factors, we then developed measures for

each CSF. The enclosed survey or opinion poll was created as the means of measuring performance in our KBDs. The measurement survey is built around the KBD and their corresponding CSFs. The plan is to use the judgment of those closest to the event to measure success and to judge how well we have done. The survey presents a statement describing how some aspect of the response was done and then allows the individual to indicate degree of agreement with the statement as it relates to the response. The survey uses a very familiar 1-7 scale judging simply how closely the observed performance met a described standard of performance and indicating a level of agreement.

Summary. This effort was originally developed by Commandant (G-MOR) who intends to target this survey to measure the response to spills or simulated exercises addressing over 1,000 gallons of oil with the caveat added that measurement requires some level of complexity. We feel that the measures must by useable by the local Area, District, and Headquarters. Ideally they are built with the objective that an Area will be able to judge itself. Within the region it is important that we provide every opportunity to evaluate our unified response efforts. Therefore we are targeting the complexity of a response or simulation where the formal mobilization of a Unified Command is needed to address and mitigate the event, rather than the size of the spill.

One of the benefits of this whole process is that we are taking steps to establish expectations for process performance. We believe this holds great potential to help our entire system pursue a better focus on what is really wanted, needed, and expected. As we continue the development of tools and the ability to measure and critique performance, we must similarly strengthen our efforts to develop the systems, tools, and techniques that will empower an Area to fully prepare for and deliver a “Best Response.” Everything we do must be done with a clear appreciation for the reality of the circumstances that the field people deal with. We are continuing to develop and gather a considerable arsenal of tools and resources with extraordinary potential, but unless we have included in the development a focus on ensuring that the federal OSCs and their Area Committees/Organizations are aware of and able to effectively and efficiently employ the resources, our work is seriously deficient.